



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/775,710

02/10/2004

Maneesh Agrawala

MS307302.01/MSFTP592US

3842

27195 7590 05/12/2008  
AMIN. TUROCY & CALVIN, LLP  
24TH FLOOR, NATIONAL CITY CENTER  
1900 EAST NINTH STREET  
CLEVELAND, OH 44114

EXAMINER

WANG, JIN CHENG

ART UNIT

PAPER NUMBER

2628

NOTIFICATION DATE

DELIVERY MODE

05/12/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com  
hholmes@thepatentattorneys.com  
lpasterchek@thepatentattorneys.com

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/775,710 | <b>Applicant(s)</b><br>AGRAWALA ET AL. |  |
|                              | <b>Examiner</b><br>Jin-Cheng Wang    | <b>Art Unit</b><br>2628                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendments***

Applicant's submission filed on 3/13/2008 has been entered. Claims 1, 2, 9, 13, 14, 16, and 20 have been amended. Claims 1-20 are pending in the application.

### ***Response to Arguments***

Applicant's arguments dated 3/13/2008 with respect to claim 1 and similar claims have been considered but are not found persuasive in view of the new ground(s) of rejection based on Price et al. US Patent Application Publication 2001/0043716 (hereinafter Price) in view of Nagae U.S. Patent No. 6,230,169 (hereinafter Nagae).

As addressed below, Price discloses a system that facilitates free form digital inking (e.g., Figs. 2-6), the system is recorded on a computer-readable medium and capable of execution by a computer, comprising:

An annotation management component (Figs. 1, 6A-6B and Paragraph 0040-0046) that generates an inking region for a digital document (*See Figs. 2A-2B and 3A-3B wherein at least an inking region in Fig. 3B is generated and zoomed; Paragraph 0032 and Paragraph 0033 for making new ink annotations and zooming/scaling of the inking region wherein the new ink annotations allow the manual and automatic re-positioning and re-sizing---using the pen to make the inking annotations---the inking region to be expanded automatically while the user makes the new ink annotations and the scaling of the data trace---inking region----allows the manual and automatic re-positioning and re-sizing of the data trace---inking region. Price teaches that the system permits freeform digital ink annotation directly on active trace and the*

Art Unit: 2628

*updated data trace is continuously expanded as the user annotates the data trace while the pen is employed to make the digital ink annotations); and*

*A navigation component (Figs. 1, 6A-6B; Paragraph 0040-0046) that enables manual and automatic re-positioning and re-sizing of the inking region relative to the digital document (Paragraph 0032 and Paragraph 0033 for making new ink annotations and zooming/scaling of the inking region wherein the new ink annotations allow the manual and automatic re-positioning and re-sizing---using the pen to make the inking annotations---the inking region to be expanded automatically while the user makes the new ink annotations and the scaling of the data trace---inking region---allows the manual and automatic re-positioning and re-sizing of the data trace---inking region. Price teaches that the system permits freeform digital ink annotation directly on active trace and the updated data trace is continuously expanded as the user annotates the data trace while the pen is employed to make the digital ink annotations), the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after annotation of the digital document based at least in part on an amount of annotation information displayed in the inking region (Replaying and updating the data trace or portions of the data trace that correspond to freeform digital ink annotations within a display window while the user annotates the digital document. Price's inking region comprises a plurality of data traces and the data traces are continuously expanded when a user continuously makes annotations on the digital document. The inking region is thus being continuously expanded when a new data trace is continuously added in the process of adding a sequence of new annotations to the digital document. The portions of the data trace that correspond to previously made freeform digital ink annotations are displayed prior to the current annotation and the portions of the data trace that*

*correspond to the current annotation are displayed concurrently with the user's annotation action. The portions of the data trace that correspond to the future annotation are displayed after a user annotates the digital document. For example, the portions or the enlarged portions in Figs. 2B or 3B are displayed and the size is adjusted in accordance with the user's current or next annotation, during the user's current or next annotation and after the user's current or next annotation in a sequence of annotations; see Paragraph 0032-0033, Paragraph 0040 and Figs. 6A-6B wherein the data trace has been concurrently updated in response to the user making a sequence of the ink annotations wherein the data trace---inking region---is concurrently updated while the user makes the sequence of the new ink annotations).*

Price discloses in Figs. 6A-6B and Paragraph 0032-0033 continuously and concurrently updating the inking region----data trace---- or portions of the inking region----data trace---- that correspond to freeform digital ink annotations while the user concurrently and continuously annotates the digital document. The inking region has been concurrently and continuously updated while the user annotates the digital document. The portions of the inking region that correspond to previously made freeform digital ink annotation actions using the pen are displayed prior to the current annotation action and the portions of the inking region that correspond to the current annotation action are displayed concurrently with the user's current annotation action. The portions of the inking region that correspond to the future annotation action are displayed after a user completes the current annotation action while the user annotates the digital document.

It needs to be further shown whether Price discloses the-positioning and re-sizing of the inking region occurs concurrently with a user annotates the digital document. Price discloses in

Art Unit: 2628

Paragraph 0032 and Paragraph 0033 making new ink annotations and zooming/scaling of the inking region wherein the new ink annotations allow the manual and automatic re-positioning and re-sizing---using the pen to make the inking annotations---the inking region is continuously expanded automatically while the user makes the new ink annotations and the scaling of the data trace---inking region----allows the manual and automatic re-positioning and re-sizing of the data trace---inking region. Price teaches that the system permits freeform digital ink annotation directly on active trace and the updated data trace is continuously expanded as the user annotates the data trace while the pen is employed to make the digital ink annotations. Price discloses in Paragraph 033 that the user may be provided with control over the scale of the display of the data trace so that the size of the corresponding portion of the data trace matches or approximates the size of the corresponding freeform digital ink annotations. Therefore, Price at least discloses the manual re-positioning and re-sizing of the inking region because the position and the size have been changed with respect to the digital document when the annotations are scaled (See Figs. 2B and 3B). Price discloses in Paragraph 0040 and Figs. 6A-6B a flow chart outlining a control routine for recording a freeform digital ink annotation. The control routine set the current position to the position of the pen and continues to step S212, the control routine updates the trace to show new data. Updating the trace when the system records the freeform digital annotations means that inking region corresponding to the trace in Fig. 2B or Fig. 3B is updated in response to (concurrently with) a user annotates the digital document. Thus, Price at least implicitly discloses the claim limitation of "concurrently". From Paragraph 0040 and Figs. 6A-6B, Price at least implicitly discloses the automatic re-positioning and/or re-sizing of the inking region because updating the data trace in Fig. 2B or Fig. 3B when the user makes/creates new

Art Unit: 2628

annotations allows the data trace to be expanded automatically in size so that more content from the new annotations are displayed.

Nagae discloses the-positioning and re-sizing of the inking region occurs concurrently with a user annotates the digital document. See Nagae Figs. 7-11 and Fig. 21A-21C wherein the inking region and the annotation window is adjusted manually and automatically as the user adjusts the annotation window with a pen and the annotation window can be manually enlarged or reduced by the user or automatically adjusted by the computer algorithm set forth in Figs. 7-11 in the annotation image magnification change section which allows the annotation display image be automatically enlarged or reduced.

Nagae teaches the annotation window. Moreover, Nagae discloses a system that facilitates free form digital inking (e.g., Figs. 12, 13, 16A-16B, 17A-17C and 18), comprising:

An annotation management component that generates an inking region for a digital document (*Figs. 12, 13, 16A-16B, 17A-17C and 18 wherein the inking region is generated for the digital document and is continuously expanded while the user employed the pen to make annotations directly on the annotation window. Although the input window is fixed in size, the inking region consisting of the inking characters made by the user using the pen is continuously being updated while the user annotates the digital document; see column 7, lines 1-22 wherein Nagae discloses that the user adjusts the annotation window with a pen wherein the window can be enlarged or reduced. Moreover, the annotation image magnification change section reduces or enlarges the annotation display image of the annotation input window on which the annotation has been written and creates an annotation display image with the changed magnification*); and

A navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document (*See Figs. 17A-17D wherein the inking region is dynamically adjusted while a user annotates the digital document---using the pen to make the annotations wherein the inking region is concurrently being expanded while the user annotates the digital document directly on the input window. Although the input window is fixed in size, the inking region is expanded while the user annotates the digital document; see column 8, lines 40-45 wherein Nagae discloses annotating the digital document by a total number of N annotations similar to the annotations displayed in Figs. 17a-17D; Figs. 12, 13, 16A-16B, 17A-17C and 18 wherein the inking region is generated for the digital document; see column 7, lines 1-22 wherein Nagae discloses that the user adjusts the annotation window with a pen and thereby the inking region is manually and/or automatically expanded wherein the window can be enlarged or reduced to thereby enlarge or reduce the inking region. Moreover, the annotation image magnification change section reduces or enlarges the annotation display image---inking region within the annotation input window on which the annotation has been written and creates an annotation display image with the changed magnification within the input window*), the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document (*See Figs. 17A-17D wherein the inking region is dynamically adjusted while a user annotates the digital document; see column 8, lines 40-45 wherein Nagae discloses annotating the digital document by a total number of N annotations similar to the annotations displayed in Figs. 17a-17D; Figs. 12, 13, 16A-16B, 17A-17C and 18 wherein the inking region is generated for the digital document; see column 7, lines 1-22 wherein Nagae discloses that the user adjusts the annotation*



*window with a pen to adjust the inking region within the annotation window wherein the window can be enlarged or reduced to thereby enlarge or reduce the inking region within the window. Moreover, the annotation image magnification change section reduces or enlarges the annotation display image---inking region within the annotation input window on which the annotation has been written and creates an annotation display image with the changed magnification).*

Nagae discloses in Figs. 7-11 and 21A-21C continuously and concurrently updating the inking region or portions of the inking region that correspond to freeform digital ink annotations while the user concurrently and continuously annotates the digital document. The inking region has been concurrently and continuously updated while the user annotates the digital document. The portions of the inking region that correspond to previously made freeform digital ink annotation actions using the pen are displayed prior to the current annotation action and the portions of the inking region that correspond to the current annotation action are displayed concurrently with the user's current annotation action. The portions of the inking region that correspond to the future annotation action are displayed after a user completes the current annotation action while the user annotates the digital document.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have incorporated Nagae's annotation window into Price's system because such annotation window, if incorporated into Price annotation system, allows the inking region to be enlarged or reduced dynamically by the user through the pen or cursor directly operates on the input window so that the inking region is continuously and concurrently being updated/expanded. One of the ordinary skill in the art would have been motivated to do so to

Art Unit: 2628

allow the annotations to be made on the inking region on the annotation window as taught by Nagae in Figs. 17a-17D (See also Nagae Figs. 11-12 and column 12, lines 20-32. See also Price Figs. 6A-6B and Paragraph 0032-0033).

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

#### **Claims 1-20:**

Claim 1 recites “a system that facilitates free form digital inking, the system is recorded on a computer-readable medium”. The system is recorded on a computer-readable medium is nothing more than a computer program recorded on a computer readable medium. Computer programs claimed as computer listing per se, i.e., the description or expression of programs, are not physical things. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Moreover, in view of applicant’s specification, the computer readable medium is not limited to tangible embodiments, instead of being defining as including tangible embodiments (e.g., ROM, EEPROM) and intangible embodiments (for example, transmission mediums such as digital and analog communication links between the client and server). As such, the claims are not limited to statutory subject matter and therefore non-statutory.

Claims 2-13 and 20 are non-statutory for the same reasons discussed above.

Claims 14-19 are the parallel method claims and are non-statutory for the same reasons discussed above.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. US Patent Application Publication 2001/0043716 (hereinafter Price) in view of Nagae U.S. Patent No. 6,230,169 (hereinafter Nagae).

Re Claims 1, 14 and 20:

Price discloses a system that facilitates free form digital inking (e.g., Figs. 2-6), the system is recorded on a computer-readable medium and capable of execution by a computer, comprising:

An annotation management component (Figs. 1, 6A-6B and Paragraph 0040-0046) that generates an inking region for a digital document (*See Figs. 2A-2B and 3A-3B wherein at least an inking region in Fig. 3B is generated and zoomed; Paragraph 0032 and Paragraph 0033 for making new ink annotations and zooming/scaling of the inking region wherein the new ink*

Art Unit: 2628

*annotations allow the manual and automatic re-positioning and re-sizing---using the pen to make the inking annotations---the inking region to be expanded automatically while the user makes the new ink annotations and the scaling of the data trace---inking region----allows the manual and automatic re-positioning and re-sizing of the data trace---inking region. Price teaches that the system permits freeform digital ink annotation directly on active trace and the updated data trace is continuously expanded as the user annotates the data trace while the pen is employed to make the digital ink annotations); and*

A navigation component (*Figs. 1, 6A-6B; Paragraph 0040-0046*) that enables manual and automatic re-positioning and re-sizing of the inking region relative to the digital document (*Paragraph 0032 and Paragraph 0033 for making new ink annotations and zooming/scaling of the inking region wherein the new ink annotations allow the manual and automatic re-positioning and re-sizing---using the pen to make the inking annotations---the inking region to be expanded automatically while the user makes the new ink annotations and the scaling of the data trace---inking region----allows the manual and automatic re-positioning and re-sizing of the data trace---inking region. Price teaches that the system permits freeform digital ink annotation directly on active trace and the updated data trace is continuously expanded as the user annotates the data trace while the pen is employed to make the digital ink annotations*), the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after annotation of the digital document based at least in part on an amount of annotation information displayed in the inking region (*Replaying and updating the data trace or portions of the data trace that correspond to freeform digital ink annotations within a display window while the user annotates the digital document. Price's inking region comprises a plurality of data traces and*

*the data traces are continuously expanded when a user continuously makes annotations on the digital document. The inking region is thus being continuously expanded when a new data trace is continuously added in the process of adding a sequence of new annotations to the digital document. The portions of the data trace that correspond to previously made freeform digital ink annotations are displayed prior to the current annotation and the portions of the data trace that correspond to the current annotation are displayed concurrently with the user's annotation action. The portions of the data trace that correspond to the future annotation are displayed after a user annotates the digital document. For example, the portions or the enlarged portions in Figs. 2B or 3B are displayed and the size is adjusted in accordance with the user's current or next annotation, during the user's current or next annotation and after the user's current or next annotation in a sequence of annotations; see Paragraph 0032-0033, Paragraph 0040 and Figs. 6A-6B wherein the data trace has been concurrently updated in response to the user making a sequence of the ink annotations wherein the data trace---inking region---is concurrently updated while the user makes the sequence of the new ink annotations).*

Price discloses in Figs. 6A-6B and Paragraph 0032-0033 continuously and concurrently updating the inking region----data trace---- or portions of the inking region----data trace---- that correspond to freeform digital ink annotations while the user concurrently and continuously annotates the digital document. The inking region has been concurrently and continuously updated while the user annotates the digital document. The portions of the inking region that correspond to previously made freeform digital ink annotation actions using the pen are displayed prior to the current annotation action and the portions of the inking region that correspond to the current annotation action are displayed concurrently with the user's current

Art Unit: 2628

annotation action. The portions of the inking region that correspond to the future annotation action are displayed after a user completes the current annotation action while the user annotates the digital document.

It needs to be further shown whether Price discloses the-positioning and re-sizing of the inking region occurs concurrently with a user annotates the digital document. Price discloses in Paragraph 0032 and Paragraph 0033 making new ink annotations and zooming/scaling of the inking region wherein the new ink annotations allow the manual and automatic re-positioning and re-sizing---using the pen to make the inking annotations---the inking region is continuously expanded automatically while the user makes the new ink annotations and the scaling of the data trace---inking region----allows the manual and automatic re-positioning and re-sizing of the data trace---inking region. Price teaches that the system permits freeform digital ink annotation directly on active trace and the updated data trace is continuously expanded as the user annotates the data trace while the pen is employed to make the digital ink annotations. Price discloses in Paragraph 033 that the user may be provided with control over the scale of the display of the data trace so that the size of the corresponding portion of the data trace matches or approximates the size of the corresponding freeform digital ink annotations. Therefore, Price at least discloses the manual re-positioning and re-sizing of the inking region because the position and the size have been changed with respect to the digital document when the annotations are scaled (See Figs. 2B and 3B). Price discloses in Paragraph 0040 and Figs. 6A-6B a flow chart outlining a control routine for recording a freeform digital ink annotation. The control routine set the current position to the position of the pen and continues to step S212, the control routine updates the trace to show new data. Updating the trace when the system records the freeform digital

annotations means that inking region corresponding to the trace in Fig. 2B or Fig. 3B is updated in response to (concurrently with) a user annotates the digital document. Thus, Price at least implicitly discloses the claim limitation of "concurrently". From Paragraph 0040 and Figs. 6A-6B, Price at least implicitly discloses the automatic re-positioning and/or re-sizing of the inking region because updating the data trace in Fig. 2B or Fig. 3B when the user makes/creates new annotations allows the data trace to be expanded automatically in size so that more content from the new annotations are displayed.

Nagae discloses the-positioning and re-sizing of the inking region occurs concurrently with a user annotates the digital document. See Nagae Figs. 7-11 and Fig. 21A-21C wherein the inking region and the annotation window is adjusted manually and automatically as the user adjusts the annotation window with a pen and the annotation window can be manually enlarged or reduced by the user or automatically adjusted by the computer algorithm set forth in Figs. 7-11 in the annotation image magnification change section which allows the annotation display image be automatically enlarged or reduced.

Nagae teaches the annotation window. Moreover, Nagae discloses a system that facilitates free form digital inking (e.g., Figs. 12, 13, 16A-16B, 17A-17C and 18), comprising:

An annotation management component that generates an inking region for a digital document (*Figs. 12, 13, 16A-16B, 17A-17C and 18 wherein the inking region is generated for the digital document and is continuously expanded while the user employed the pen to make annotations directly on the annotation window. Although the input window is fixed in size, the inking region consisting of the inking characters made by the user using the pen is continuously being updated while the user annotates the digital document; see column 7, lines 1-22 wherein*

*Nagae discloses that the user adjusts the annotation window with a pen wherein the window can be enlarged or reduced. Moreover, the annotation image magnification change section reduces or enlarges the annotation display image of the annotation input window on which the annotation has been written and creates an annotation display image with the changed magnification); and*

A navigation component that provides algorithms that enable manual and automatic re-positioning and re-sizing of the inking region relative to the digital document (See Figs. 17A-17D wherein the inking region is dynamically adjusted while a user annotates the digital document---using the pen to make the annotations wherein the inking region is concurrently being expanded while the user annotates the digital document directly on the input window. Although the input window is fixed in size, the inking region is expanded while the user annotates the digital document; see column 8, lines 40-45 wherein Nagae discloses annotating the digital document by a total number of  $N$  annotations similar to the annotations displayed in Figs. 17a-17D; Figs. 12, 13, 16A-16B, 17A-17C and 18 wherein the inking region is generated for the digital document; see column 7, lines 1-22 wherein Nagae discloses that the user adjusts the annotation window with a pen and thereby the inking region is manually and/or automatically expanded wherein the window can be enlarged or reduced to thereby enlarge or reduce the inking region. Moreover, the annotation image magnification change section reduces or enlarges the annotation display image----inking region within the annotation input window on which the annotation has been written and creates an annotation display image with the changed magnification within the input window), the re-positioning and re-sizing of the inking region occurs prior to, concurrently with and after a user annotates the digital document (See Figs. 17A-



*17D wherein the inking region is dynamically adjusted while a user annotates the digital document; see column 8, lines 40-45 wherein Nagae discloses annotating the digital document by a total number of N annotations similar to the annotations displayed in Figs. 17a-17D; Figs. 12, 13, 16A-16B, 17A-17C and 18 wherein the inking region is generated for the digital document; see column 7, lines 1-22 wherein Nagae discloses that the user adjusts the annotation window with a pen to adjust the inking region within the annotation window wherein the window can be enlarged or reduced to thereby enlarge or reduce the inking region within the window. Moreover, the annotation image magnification change section reduces or enlarges the annotation display image---inking region within the annotation input window on which the annotation has been written and creates an annotation display image with the changed magnification).*

Nagae discloses in Figs. 7-11 and 21A-21C continuously and concurrently updating the inking region or portions of the inking region that correspond to freeform digital ink annotations while the user concurrently and continuously annotates the digital document. The inking region has been concurrently and continuously updated while the user annotates the digital document. The portions of the inking region that correspond to previously made freeform digital ink annotation actions using the pen are displayed prior to the current annotation action and the portions of the inking region that correspond to the current annotation action are displayed concurrently with the user's current annotation action. The portions of the inking region that correspond to the future annotation action are displayed after a user completes the current annotation action while the user annotates the digital document.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have incorporated Nagae's annotation window into Price's system because such annotation window, if incorporated into Price annotation system, allows the inking region to be enlarged or reduced dynamically by the user through the pen or cursor directly operates on the input window so that the inking region is continuously and concurrently being updated/expanded. One of the ordinary skill in the art would have been motivated to do so to allow the annotations to be made on the inking region on the annotation window as taught by Nagae in Figs. 17a-17D (See also Nagae Figs. 11-12 and column 12, lines 20-32. See also Price Figs. 6A-6B and Paragraph 0032-0033).

Claim 2:

The claim 2 encompasses the same scope of invention as that of the claim 1 except additional claim limitation that the annotation management component is invoked to generate the inking region by identifying a point of interest on the digital document by at least one of a manual or an automatic technique. However, Price and Nagae further disclose the claim limitation that the annotation management component is invoked to generate the inking region by identifying a point of interest on the digital document by at least one of a manual or an automatic technique (*See Paragraph 0032, 0034-0035 and Figs. 2A-2B and 3A-3B wherein the user annotates the digital document by at least one of a manual and an automatic technique to enable rendering of new data on a trace, recording of a freeform digital ink annotation on an automatic trace, rendering of freeform digital ink annotations on automatic traces, viewing a portion of an automatic trace that corresponds to some or all of the freeform digital ink*

Art Unit: 2628

*annotations at a user's request and managing the storage of the data trace based upon freeform digital ink annotations. Nagae Figs. 7-11 and 21A-21C).*

Claim 4:

The claim 4 encompasses the same scope of invention as that of the claim 1 except additional claim limitation that the inking region is generated to cover a subset of the digital document such that the remaining document can be concurrently viewed.

However, Price and Nagae further disclose the claim limitation that the inking region is generated to cover a subset of the digital document such that the remaining document can be concurrently viewed (Figs. 2A-2B, 3A-3B; *See Paragraph 0032, 0034-0035 and Figs. 2A-2B and 3A-3B wherein the user annotates the digital document by at least one of a manual and an automatic technique to enable rendering of new data on a trace, recording of a freeform digital ink annotation on an automatic trace, rendering of freeform digital ink annotations on automatic traces, viewing a portion of an automatic trace that corresponds to some or all of the freeform digital ink annotations at a user's request and managing the storage of the data trace based upon freeform digital ink annotations. Nagae Figs. 7-11 and 21A-21C).*

Re Claims 5 and 19:

The claim 5 encompasses the same scope of invention as that of the claim 1 except additional claim limitation that the inking region magnifies the portion of the digital document within the inking region.

However, Price further discloses the claim limitation that the inking region magnifies the portion of the digital document within the inking region (*Figs. 3A-3B wherein the inking region in Fig. 3B is magnified/zoomed and Paragraph 0035 wherein the cited reference discloses scaling of the record along with the freeform digital ink annotations at the user's request*).

The claim 19 is subject to the same rationale of rejection set forth in the claim 5.

Claim 6:

The claim 6 encompasses the same scope of invention as that of the claim 5 except additional claim limitation that the magnification factor is defined such that the user inks at a similar size to document information.

However, Price and Nagae further disclose the claim limitation that the magnification factor is defined such that the user inks at a similar size to document information (*Paragraph 0033 wherein the cited reference discloses the user may be provided with control over the scale of the display of the data trace so that the scale of the entire data trace may be adjusted so that the size of the corresponding portion of the data trace matches or approximates the size of the corresponding freeform digital annotation and an embodiment may scale the freeform digital ink annotations in correspondence with the scaling of a display of the data trace in accordance with user preferences. Nagae Figs. 7-11 and 21A-21C*).

Re Claims 7 and 16:

The claim 7 encompasses the same scope of invention as that of the claim 1 except additional claim limitation wherein the inking region is closed via one of a digital pen, a mouse, a button or voice activation.

However, Price and Nagae further disclose the claim limitation wherein the inking region is closed via one of a digital pen, a mouse, a button or voice activation (*Price discloses in Paragraph 0032 a pen is used to permit freeform digital ink annotations. Nagae Figs. 7-11 and 21A-21C*).

The claim 16 is subject to the same rationale of rejection set forth in the claim 7.

Re Claims 8 and 15:

The claim 8 encompasses the same scope of invention as that of the claim 1 except additional claim limitation wherein inking within the inking region scales down to a size similar to the text within the digital document when the inking region is closed.

However, Price and Nagae further disclose the claim limitation wherein inking within the inking region scales down to a size similar to the text within the digital document when the inking region is closed (*Paragraph 0033 wherein the cited reference discloses the user may be provided with control over the scale of the display of the data trace so that the scale of the entire data trace may be adjusted so that the size of the corresponding portion of the data trace matches or approximates the size of the corresponding freeform digital annotation and an embodiment may scale the freeform digital ink annotations in correspondence with the scaling of a display of the data trace in accordance with user preferences. Nagae Figs. 7-11 and 21A-21C*).

The claim 15 is subject to the same rationale of rejection set forth in the claim 8.

Claim 9:

The claim 9 encompasses the same scope of invention as that of the claim 1 except additional claim limitation wherein the navigation component employs one or more of a move

Art Unit: 2628

inking region, a move digital document or a create space technique to navigate through the digital document.

However, Price and Nagae further disclose the claim limitation wherein the navigation component employs one or more of a move inking region, a move digital document or a create space technique to navigate through the digital document (*Paragraph 0033 wherein the cited reference discloses the user may be provided with control over the scale of the display of the data trace so that the scale of the entire data trace may be adjusted so that the size of the corresponding portion of the data trace matches or approximates the size of the corresponding freeform digital annotation and an embodiment may scale the freeform digital ink annotations in correspondence with the scaling of a display of the data trace in accordance with user preferences; Price discloses in Paragraph 0032 a pen is used to permit freeform digital ink annotations wherein the trace might extend from one edge to the other when the pen is moved. Nagae Figs. 7-11 and 21A-21C*).

Re Claims 10-12:

The claim 10 encompasses the same scope of invention as that of the claim 9 except additional claim limitation the move inking region, move digital document and create space techniques are based on a space-scale framework.

However, Price and Nagae further disclose the claim limitation the move inking region, move digital document and create space techniques are based on a space-scale framework (*Paragraph 0033 wherein the cited reference discloses the user may be provided with control over the scale of the display of the data trace so that the scale of the entire data trace may be adjusted so that the size of the corresponding portion of the data trace matches or approximates*

Art Unit: 2628

*the size of the corresponding freeform digital annotation and an embodiment may scale the freeform digital ink annotations in correspondence with the scaling of a display of the data trace in accordance with user preferences. Nagae Figs. 7-11 and 21A-21C).*

The claims 11-12 are subject to the same rationale of rejection set forth in the claim 10.

Re Claims 13 and 18:

The claim 13 encompasses the same scope of invention as that of the claim 1 except additional claim limitation an orientation of the inking region is determined via moving a digital pen across the document in one of a right-to-left, a left-to-right, a top-to-bottom, or a bottom-to-top manner.

However, Price and Nagae further disclose the claim limitation an orientation of the inking region is determined via moving a digital pen across the document in one of a right-to-left, a left-to-right, a top-to-bottom, or a bottom-to-top manner (*Price discloses in Paragraph 0032 a pen is used to permit freeform digital ink annotations. Nagae Figs. 7-11 and 21A-21C).*

The claim 18 is subject to the same rationale of rejection set forth in the claim 13.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. US Patent Application Publication 2001/0043716 (hereinafter Price) in view of Nagae U.S. Patent No. 6,230,169 (hereinafter Nagae) and N. O. Bouvin et al., "Fluid Annotations Through Open Hypermedia: Using and Extending Emerging Web Standards", **Proceedings of the 11th international conference on World Wide Web**, May 7-11, 2002, Honolulu, Hawaii, Pages 160-171 (hereinafter Bouvin).

Claim 3:

The claim 3 encompasses the same scope of invention as that of the claim 1 except additional claim limitation that the inking region is generated in connection with animation that makes it appear the inking region grows out of the digital document.

Price and Nagae do not explicitly teach the claim limitation that the inking region is generated in connection with animation that makes it appear the inking region grows out of the digital document. However, Price teaches in Figs. 2A-2B and 3A-3B that the inking region in Fig. 2B or 3B grows out of the digital document and thus Price at least suggests the inking region is generated in connection with animation that makes it appear the inking region grows out of the digital document.

However, Bouvin discloses the claim limitation that the inking region is generated in connection with animation that makes it appear the inking region grows out of the digital document (See Fig. 2 in Page 162 wherein the smooth gloss animation associated with an annotation is displayed).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to have incorporated Bouvin's animation into Price and Nagae's algorithm system



Art Unit: 2628

because Price teaches in Figs. 2A-2B and 3A-3B that the inking region in Fig. 2B or 3B grows out of the digital document and thus Price at least suggests the inking region is generated in connection with animation that makes it appear the inking region grows out of the digital document.

One of the ordinary skill in the art would have been motivated to provide the smooth gloss animation for the annotated portion or passage of the document (See Bouvin Fig. 2 in Page 162).

The claim 17 is subject to the same rationale of rejection set forth in the claim 3.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (571) 272-7665. The examiner can normally be reached on 8:00 - 6:30 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jin-Cheng Wang/  
Primary Examiner, Art Unit 2628